IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:	Atty. Docket No.: 003797.81487
Darryl E. RUBIN et al.	
Serial No.: 09/457,109	Group Art Unit: 2176
Filed: December 7, 1999	Examiner: Nguyen, M.
For: COMPUTER USER INTERFACE ARCHITECTURE WHEREIN BOTH CONTENT AND USER INTERFACE ARE COMPOSED OF DOCUMENTS WITH LINKS	Confirmation No.: 7310

APPEAL BRIEF

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief-Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314
Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed November 13, 2006, this is a Replacement Appeal Brief in accordance with 37 C.F.R. § 41.37 in support of Appellants' March 9, 2006, Notice of Appeal and Appellants' March 9, 2006, Pre-Appeal Brief Request for Review. Appeal is taken from the Final Office Action mailed November 9, 2005, and the Notice of Panel Decision from Pre-Appeal Brief Review mailed April 11, 2006. Please charge any necessary fees in connection with this Replacement Appeal Brief to our Deposit Account No. 19-0733.

REAL PARTY IN INTEREST
37 C.F.R. § 41.37(c)(1)(i)

The owner of this application, and the real party in interest, is Microsoft Corporation.

RELATED APPEALS AND INTERFERENCES
37 C.F.R. § 41.37(c)(1)(ii)

There are no related appeals and interferences.

STATUS OF CLAIMS
37 C.F.R. § 41.37(c)(1)(iii)

Claims 2-18 and 21 stand rejected and are shown in the attached appendix. Claims 1, 19, and 20 are canceled. Only pending claims 2-18 and 21 are shown in the attached appendix.

Appellant hereby appeals the rejection of claims 2-18 and 21.

STATUS OF AMENDMENTS
37 C.F.R. § 41.37(c)(1)(iv)

Appellants' Amendment and Response filed January 11, 2006, was denied entry per the Advisory Action mailed February 8, 2006. As such, the Claims Appendix represents the claims based on entry of the Amendment and Response filed August 31, 2005.

SUMMARY OF CLAIMED SUBJECT MATTER
37 C.F.R. § 41.37(c)(1)(v)

In making reference herein to various portions of the specification and drawings in order to explain the claimed invention, Appellant does not intend to limit the claims; all references to the specification and drawings are illustrative unless otherwise explicitly stated.

The present invention provides for computer user interface architectures. More specifically, the present invention is directed to computer user interfaces in which links in documents have a display format based upon a certain property. *Specification*, p. 3, ll. 8-23.

According to various embodiments, the invention includes a user interface architecture in which user content and user interface are composed of documents with links. *Specification*, p. 3,

ll. 8-10. User access, interact with, and navigate among both user content documents and user interface documents in a unified way, namely, by activating links. *Specification*, p. 3, ll. 27-28.

A link can relate a spot or region in a document with a spot or region in another document, so that touching the link causes the display to navigate to that other document. In addition, a link can also relate a spot or region in a document and an active runable object that when a user activates that link of touches that spot in the document, the associated object is run. Parameters for the execution of the object may be supplied by properties associated with the link. *Specification*, p. 3, ll. 10-16, and p. 10, ll. 13-18. In addition, the display format of the link may be configured by a user. *Specification*, p. 11, ll. 3-6.

Links have properties that govern their appearance and behavior. For example, a link's properties may dictate that it appear as a blue underscored text string as in prior art browsers, or as a 3D button, as a graphic icon, as a thumbnail image of the content being linked to, or even as an embedded frame that is open on the content being linked to. *Specification*, p. 3, l. 2- to p. 4, l. 2. The ability to control a link's appearance and behavioral properties makes possible rich authoring and customization of both content and the user interface. *Specification*, p. 11, ll. 4-6.

The document-with-links UI may display the same page of a document differently depending upon which link navigated a user to the page. *Specification*, p. 16, ll. 13-22. One principle of the documents-with-links UI is that the path a user takes to reach a document typically affects the behavior and presentation of the document. *Specification*, p. 17, ll. 22-23.

Figure 5 depicts an example Start Page displayed on a personal viewer user interface 500 in accordance with one or more aspects of the present invention. *Specification*, p. 5, ll. 13-14. Similarly, Figure 9 depicts an example of a pinned user content page displayed on a personal

viewer user interface in accordance with at least one aspect of the present invention. *Specification*, p. 5, ll. 21-22. Figure 5 illustrates a computer user interface including a plurality of document pages. The document pages may include the overall example Start Page 500 shown in Figure 5 in addition to the My Documents 520 folder listing shown in Figure 5. *Specification*, p. 25, ll. 5-15. Other document pages may include, but are not limited to, a Guide Book, such as the Guide Book shown in Figure 8, a Map Book (not shown in a particular Figure), an annotations folder (not shown in a particular Figure), a Notebook (not shown in a particular folder), a mailbox (not shown in a particular Figure), a calendar (not shown in a particular Figure), and an address book (not shown in a particular Figure). *Specification*, p. 24, l. 28 to p. 26, l. 14. Figure 5 further illustrates and illustrative example of at least two of the plurality of document pages, namely My Documents 520 and touch zone 508 include links. See *FIG. 5*.

Depending upon a link's properties, when the link is displayed, content of the linked-to document, or other information about the linked to document may be examined and displayed in a frame in the linked-from document. *Specification*, p. 22, ll. 12-16 and p. 30, ll. 22-24. For instance, two examples, previous link 700 in FIG. 7 and previous link 1102 in FIG. 11, depict how examining a link's target allows the personal viewer user interface to display information about the destination of a link. The destination of link 700 is Earth to the Moon, such as is shown, for example, in FIG. 6, while the destination of previous link 1102 is the Start Page, such as shown in FIG. 5. *Specification*, p. 30, ll. 24-28 and FIGs. 5-7 and 11. The link may relate a spot in a document page with an executable object. For example, document and command shortcuts and toolbar tabs may be presented a one or more links in bottom margin 514.

Document shortcuts or other object placed here are associated with the display surface 502. *Specification*, p. 23, ll. 11-13.

The display format of a link may be based upon a number of properties, including: latency periods for updating the display of the linked-to content relative to a change in the linked-to content (*Specification*, p. 33, ll. 1-7, not shown in a particular Figure) and the characteristics of the linked-to document (*Specification*, p. 3, ll. 22-23, not shown in a particular Figure).

How a link is displayed is controlled by its properties. Conventions and heuristics may be used to assign values to these properties at the time the link is created. *Specification*, p. 30, ll. 11-12. Example heuristics may be used to provide most-likely-to-use links to additional material, frequently used links, and command choices. *Specification*, p. 38, l. 2 to p. 39, l. 3, not shown in a particular Figure.

Other aspects of the present invention provide for a computer user interface for displaying the same page of a document differently depending upon which link navigated a user to the page. *Specification*, p.16, ll. 13-14, not shown in a particular Figure.

A personal viewer user interface link property sheet, like user content and other user interface pages, is implemented as a document. *Specification*, p. 31, ll. 1-2, not shown in a particular Figure. The first page may contain just the property commands, information about where the link leads to, and a chooser that lets a user choose from a few options on how the hotspot should appear (e.g., emphasized text, button, icon, or thumbnail). *Specification*, p. 31, ll. 7-10, not shown in a particular Figure. See entire section called <u>Link Property Sheet</u> in *Specification*, p. 31, l. 1 to p. 33, l. 7, for additional examples.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
37 C.F.R. § 41.37(c)(1)(vi)

The remaining ground of rejection on appeal includes:

1)   Claims 2-5, 9-18, and 21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,772,139 to Smith, III et al. (hereinafter referred to as "*Smith*").

2)   Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Smith* in view of U.S. Patent No. 6,151,622 to Fraenkel et al. (hereinafter referred to as "*Fraenkel*").

ARGUMENT
37 C.F.R. § 41.37(c)(1)(vii)

1.   Claims 2-5, 9-18, and 21 are patentably distinct from *Smith*.

The Final Office Action mailed November 9, 2005 (hereinafter referred to as *Final Action*) and the Advisory Action mailed February 8, 2006 (hereinafter referred to as *Advisory Action*), rejects claims 2-5, 9-18, and 21 as having been anticipated by *Smith*. Appellants respectfully traverse this rejection

Appellants' claim 21 recites, among other features, "wherein the link relates a spot in a document page with an executable object." To describe this feature, the *Final Action* maintains its previous rejection in the non-final Office Action mailed June 3, 2005, citing col. 5, lines 27-34 of *Smith*, relying on the ability to navigate to a target web page when clicking on a link. In response to each office action, Appellants' point to the Summary section of Appellants' original written description that describes the difference between an executable object and navigation. Specifically, page 3, lines 10-14 of Appellants' original written description states:

> A link can relate a spot or region in a document with a spot or region in another document, so that touching the link causes the display **to navigate** to that other

- 6 -

document. **A link can also** relate a spot or region in a document and an **active runable object** such that when a user activates that link or touches that spot in the document, the associated object is run. (emphasis added)

Smith describes traditional web page navigation of a link that navigates to another web page. The *Final Action* and the *Advisory Action* even states such indicating, "clicking the mouse on the underlined text, the visitor 'navigates' to the Web page shown in Fig. 2..." (*Final Action*, page 3) and "by clicking on the hypertext link with the mouse, the user directs the browser program to 'follow the link' by 'navigating' to the URL" (*Advisory Action*, page 2). Navigation to a web page is different from a runable/executable object and *Smith* describes nothing more than traditional web page navigation.. *Smith* fails to teach or suggest Appellants' feature, "wherein the link relates a spot in a document page with an executable object." Thus, claim 21 is patentably distinguishable from *Smith* for at least the above stated reasons. As such, withdrawal of the rejection is respectfully requested.

Appellants' independent claim 2 recites, among other features, "wherein the display format of the link is based upon an examination of the content of a target document associated with the link." In rejecting this feature, the *Final Action* and *Advisory Action* point to col. 4, lines 17-20, col. 9, lines 1-12, and col. 41, line 1- col. 42, line 2 of *Smith*. For the convenience of review, col. 4, lines 17-20, col. 9, lines 1-12 of the cited passages are provided below:

> Link properties can be specified by users to control the automatic installation of links and/or to control what is displayed while browsing the link databases. (Col. 4, lines 17-20)

> While browsing, links and/or entire context subtrees can be marked for inclusion or exclusion in subsequent automatic link installations;
> it provides a convenient means for navigating to contexts in which subcontexts and/or key-phrases can be added and/or edited by the user, or to key-phrase directories in which links can be added and/or edited and/or rated; and

by displaying links selectively according various link properties, browsing provides a means for viewing useful link subsets, such as all links entered by the user or user's group. (Col. 9, lines 1-12)

Inspection of these cited passages in addition to col. 41, line 1- col. 42, line 2 reveals nothing remotely related to a display format of a link being **based upon an examination of the content of a target document associated with the link**. At best, the cited portions of *Smith* describe how links or context subtrees may be marked for inclusion/exclusion in automatic link installations, means for navigating to contexts, and displaying links based upon link subsets, such as all links entered by a user. Examination of a target document associated with the link is neither taught nor suggested. Thus, *Smith* is wholly devoid of a teaching or suggestion of the claim 2 combination of features. Appellants' claim 2 is patentably distinct over *Smith* for similar reasons as described above with reference to Appellants' claim 21 and further in view of the additional reasons herein.

Appellants' independent claim 3 recites, among other features, "wherein the link has a property indicating the display update latency of the link." To show this feature, the *Final Action* and *Advisory Action* rely on the same support for rejecting claim 21 and points to col. 27, lines 32-42 and col. 10, lines 39-48 of *Smith*. Again, for the convenience of review, the cited portions of *Smith* are included below:

> If there are any pre-existing links in the same context directory with the same name and URL as a newly submitted link, the pre-existing link is retained unless the new submission is by the same owner. (Link properties could be updated or added in this manner, for example. Ratings and reviews are not affected since they may not be submitted in a dictionary file.) Rejected submissions are listed in a message from the server delivered in a dynamic web page, as is typical. Similar action is taken for other kinds of messages to the user as needed. (Col. 27, lines 32-42)

"Modify Additions" allows the user to edit (modify or delete) any information he or she submitted to the W3K site. In particular, it is possible to modify link properties, delete a link, delete a context or key-phrase dictionary wholly owned by the user or the user's group, and so on. A user belonging to one or more groups may edit any information submitted by anyone in any of those groups. A set of records to be edited can be created by means of the search facility. A record may hold the information associated with a link, key-phrase directory, or context directory. (Col. 10, lines 39-48)

Inspection of the cited passage reveals <u>nothing</u> remotely related to a link having a property indicating the display update latency of the link. The *Final Action* responds to Appellants' argument by citing the above portion of *Smith* and stating, "Smith further teaches the link[s] has a property indicating the display update latency of the link[s]." (Action, page 4). Appellants disagree entirely with this statement. Neither the cited portion of *Smith* nor any other portion explicitly teaches this feature of Appellants' claim 3. The Action reads *Smith* onto this claim 3 feature without any teaching or even suggestion. Appellants' original written description provides one example of a property indicating a display update latency of a link. A link may have a property specifying the link as hot (display updated often), warm (display updated les often than hot), or cold (display not updated). (*Specification*, p.33, ll. 1-7).

Smith is wholly devoid of a teaching or suggestion of, "wherein the link has a property indicating the display update latency of the link." As such, Appellants' claim 3 is patentably distinct over *Smith* for similar reasons as described above with reference to Appellants' claim 21 and further in view of the additional reasons herein.

Appellants' independent claim 4 recites, among other features,

in response to activation of a second link by a user, the second link being different than the first link and **linking to the same document page linked to by the first link**, navigating to the linked-to document page and displaying the document page

in a second display format, the second display format being different than the first display format. (emphasis added)

To show this feature, the *Final Action* and *Advisory Action* rely on col. 3, lines 18-27 and col. 4, lines 9-20 of *Smith*. Contrary to the Action's assertion however, *Smith* neither teaches nor suggests these features.

At best, *Smith* describes how a link-target URL may point to another Web page or it may simply point to another location within the **same electronic document**. *Smith* describes the general navigation among various pages of an electronic document; however, neither the cited portion, nor any other portion of *Smith*, teaches or suggest the **same document page**. Claim 4 recites linking to the same document page as one could access in response to activation of a first link and displaying the **same document page** but in a second display format that is different from the first display format. *Smith* fails to teach or suggest two links to the **same document page**. As such, for at least the above-stated reasons, withdrawal of the rejection is respectfully requested.

Appellants' dependent claim 9 recites, among other features, "using heuristics to automatically provide most-likely-to-use links to additional material." To show this feature, the *Final Action* relies on col. 3, lines 1-18 of *Smith*. Contrary to the Action's assertion however, *Smith* neither teaches nor suggests this feature. The cited portion of *Smith* appears to have nothing that relates to heuristics. The cited portion of *Smith* describes the orientation between HTML code and text on a screen of a display in addition to how a link may be in a separate color from normal, unlinked text. Appellants fail to see any description of the features of dependent claim 9 in the cited portion nor in any other portion of *Smith*. As *Smith* fails to teach or suggest,

"using heuristics to automatically provide most-likely-to-use links to additional material," Appellants respectfully request withdrawal of the present invention.

Appellants' claims 10-13, which depend from claim 9, are patentably distinct over *Smith* for at least the same reasons as claim 9. In addition, Appellants' claim 10 recites, among other features, "providing at least one of the most-likely-to-use links based upon documents previously navigated to by the user." For this feature, the *Final Action* relies on col. 3, lines 22-27 of *Smith*. Once again, Appellants fail to see any description of the features of dependent claim 10 in the cited portion nor in any other portion of *Smith*. The cited portion describes hypertext links in HTML documents for navigation in the World Wide Web. In addition, the cited portion describes how "**[w]eb browsers** further make it easy to return to the page containing the link by using the 'back' button, or the 'history' list of visited pages maintained by the **browser**" (*Smith*, col. 3, lines 24-27, emphasis added). The cited portion describes traditional web browser functions. The cited portion or any other portion of *Smith* fails to teach or suggest Appellants' claim 10 features, "providing at least one of the most-likely-to-use links based upon documents previously navigated to by the user." As such, withdrawal of the rejection is respectfully requested.

Appellants' claim 11 recites, among other features, "providing at least one of the most-likely-to-use links based upon documents having subject matter similar to a document being viewed by the user." To show this feature, the *Final Action* relies on col. 17, lines 1-12 of *Smith*. The cited portion of *Smith* describes how a number is users may have restricted subdirectories on a same topic. Experts may provide "packages" of links on the same topic. Yet again, this cited portion, nor any other portion of *Smith*, teaches or suggest Appellants' claim 11 features,

"providing at least one of the most-likely-to-use links based upon documents having subject matter similar to a document being viewed by the user." As such, because *Smith* fails to teach or suggest each and every feature, withdrawal of the rejection of claim 11 is respectfully requested.

Appellants' claim 12 recites, among other features, "providing at least one of the most-likely-to-use links based upon documents created by an author who is the same as an author of a document being viewed by the user." To describe this feature, the *Final Action* relies on col. 9, lines 52-67 of *Smith*. The cited portion describes a "Select Hierarchy" link that navigates to a page where a different context hierarchy can be selected for browsing. At best, the cited portion describes how hierarchies, not links, can be designated by their creators as public, restricted, or private. The cited portion fails to teach or suggest anything with respect to, "providing at least one of the most-likely-to-use links based upon documents created by an author who is the same as an author of a document being viewed by the user," as recited in Appellants' claim 12. Withdrawal of the rejection is respectfully requested.

Appellants' claim 13 recites, among other features, "providing at least one of the most-likely-to-use links based upon documents created during a first time period substantially the same as a time period during which a document being viewed by the user was created." To describe this feature, the *Final Action* relies on "the first choice 101" description in col. 5, lines 20-66 of *Smith*. The cited portion of *Smith* describes a World Wide Web "home page." The cited portion fails to teach or suggest anything with respect to a time period. Still further, no other portion of Smith teaches or suggests Appellants' claim 13 features, "providing at least one of the most-likely-to-use links based upon documents created during a first time period substantially

the same as a time period during which a document being viewed by the user was created."
Therefore, withdrawal of the rejection is respectfully requested.

Appellants' claim 14 recites, among other features, "using heuristics to automatically provide a set of command choices to the user." For this feature, the *Final Action* relies on col. 3, lines 22-27 of *Smith*. Once again, Appellants fail to see any description of the features of dependent claim 14 in the cited portion nor in any other portion of *Smith*. As recited above with respect to dependent claim 10, the cited portion describes hypertext links in HTML documents for navigation in the World Wide Web. As such, withdrawal of the rejection of Appellants' claim 14 is respectfully requested. In addition, dependent claims 15-17, which depend from claim 14, are patentably distinct over *Smith* for at least the same reasons as claim 14.

Appellants' claim 15 recites, among other features, "including at least one command in the set of command choices based upon analysis of the user's current document context," Appellants' claim 16 recites, among other features, "including at least one command in the set of command choices based upon a set of commands recently invoked by the user," and Appellants' claim 17 recites, among other feature, "including at least one command in the set of command choices based upon commands the user has invoked most frequently in the past from contexts substantially the same as the user's current document context." For each of these features, the *Final Action* relies on col. 3, lines 1-27 of *Smith*. The cited portion describes traditional orientation of a web page and operational functions of a web browser. The cited portion, or any other portions, fails to teach or suggest these features of Appellants' claims 15 17. Withdrawal of the rejections is respectfully requested.

2.   Claims 6-8 are patentably distinct from *Smith* in view of *Fraenkel.*

Appellants' claim 6 recites, among other features, "displaying, in a display frame associated with a link in a linked-from document page, information about a linked–to document page." The *Final Action* cites col. 3, lines 48-63 and Fig. 2 of *Fraenkel*. The cited portion describes a browser window 200 sub-divided into three frames 201-203 associated with different URLs, where clicking on a link in one frame has no affect on the other two frames. (*Fraenkel*, col. 3, lines 48-63 and Fig. 2). For this further reason, even assuming, but not admitting, that the combination of *Smith* and *Fraenkel* is proper, the combination does not result in the claim 6 invention.

Appellants' claim 7 recites, among other features, "displaying, in a display frame associated with a link in a linked-from document page, content of a linked–to document page." The *Final Action* cites col. 3, line 48 to col. 4, line 11 and Fig. 3 of *Fraenkel*. Again the cited portion of *Fraenkel* fails to teach or suggest content of a linked-to document page displayed in a display frame associated with a link in a linked-from document page. As such, because the combination of *Smith* and *Fraenkel* fails to teach or suggest each and every feature of Appellants' claim 7, withdrawal of the rejection is respectfully requested. Appellants' claim 8, which depends from claim 7, is patentably distinct over the art of record for at least the same reasons as their base claim and further in view of the novel features recited therein. For example, Appellants' claim 8 recites, among other features, "updating the display of the linked-to content at a rate specified by a property of the link linking the linked-from and linked-to document pages." The *Final Action* relies on col. 10, lines 39-43, col. 17, lines 59-62, col. 27, lines 33-42, and Figs. 5 and 7 of *Smith* as allegedly describing this feature. Again, the cited

portion of *Smith* fails to teach or suggest this feature of Appellants' claim 8. As such,

withdrawal of the rejection of claim 8 is respectfully requested.

CONCLUSION

For all of the foregoing reasons, Appellants respectfully submits that the final rejection of

claims 2-18 and 21 is improper and should be reversed.

Respectfully submitted,
BANNER & WITCOFF, LTD.

Dated: December 8, 2006   By: /John M. Fleming/
John M. Fleming
Registration No. 56,536

1001 G Street, N.W.
Washington, D.C. 20001-4597
Tel: (202) 824-3000
Fax: (202) 824-3001

CLAIMS APPENDIX
37 C.F.R. § 41.37(c)(1)(viii)

Claim 2: A computer user interface comprising:

a plurality of document pages; and

at least two of the document pages including links, one of the links having a property that indicates a display format for the link, wherein the display format of the link is based upon an examination of the content of a target document associated with the link.

Claim 3: A computer user interface comprising:

a plurality of document pages; and

at least two of the document pages including links, one of the links having a property that indicates a display format for the link, wherein the link has a property indicating the display update latency of the link.

Claim 4: A computer readable medium having computer-executable instructions for performing the steps of:

in response to activation of a first link by a user, navigating to a document page and displaying the document page in a first display format;

in response to activation of a second link by a user, the second link being different than the first link and linking to the same document page linked to by the first link, navigating to the linked-to document page and displaying the document page in a second display format, the second display format being different than the first display format;

the first display format depending upon at least one property of the first link; and

the second display format depending upon at least one property of the second link.

Claim 5: A computer readable medium having computer executable instructions for performing the steps of:

providing a plurality of user interface document pages to a user, at least one of the user interface document pages having at least a first link;

providing a plurality of user content document pages to a user, at least one of the user content document pages having at least a second link; and

indicating via at least one link property a display format for at least one of the first and second links.

Claim 6: The computer readable medium of claim 5 having further executable instruction for performing steps comprising:

displaying, in a display frame associated with a link in a linked-from document page, information about a linked–to document page.

Claim 7: The computer readable medium of claim 5 having further executable instruction for performing steps comprising:

displaying, in a display frame associated with a link in a linked-from document page, content of a linked–to document page.

Claim 8: The computer readable medium of claim 7 having further executable instruction for performing steps comprising:

updating the display of the linked-to content at a rate specified by a property of the link linking the linked-from and linked-to document pages.

Claim 9: The computer readable medium of claim 5 having further executable instructions for performing steps comprising:

using heuristics to automatically provide most-likely-to-use links to additional material.

Claim 10: The computer readable medium of claim 9 having further executable instructions for performing steps comprising:

providing at least one of the most-likely-to-use links based upon documents previously navigated to by the user.

Claim 11: The computer readable medium of claim 9 having further executable instructions for performing steps comprising:

providing at least one of the most-likely-to-use links based upon documents having subject matter similar to a document being viewed by the user.

Claim 12: The computer readable medium of claim 9 having further executable instructions for performing steps comprising:

providing at least one of the most-likely-to-use links based upon documents created by an author who is the same as an author of a document being viewed by the user.

Claim 13: The computer readable medium of claim 9 having further executable instructions for performing steps comprising:

providing at least one of the most-likely-to-use links based upon documents created during a first time period substantially the same as a time period during which a document being viewed by the user was created.

Claim 14: The computer readable medium of claim 5 having further executable instructions for performing steps comprising:

using heuristics to automatically provide a set of command choices to the user.

Claim 15: The computer readable medium of claim 14 having further executable instructions for performing steps comprising:

including at least one command in the set of command choices based upon analysis of the user's current document context.

Claim 16: The computer readable medium of claim 14 having further executable instructions for performing steps comprising:

including at least one command in the set of command choices based upon a set of commands recently invoked by the user.

Claim 17: The computer readable medium of claim 14 having further executable instructions for performing steps comprising:

including at least one command in the set of command choices based upon commands the user has invoked most frequently in the past from contexts substantially the same as the user's current document context.

Claim 18: The computer readable medium of claim 5 wherein at least one of the user content document pages is an e-mail message, the computer readable medium having further executable instruction for performing steps comprising:

displaying at least one second link within an e-mail message document page, the at least one second link, upon activation, causing command code to be executed to perform an operation selected from the group consisting of: reply, reply to all, forward, and delete.

Claim 21: A computer user interface comprising:

a plurality of document pages; and

at least two of the document pages including links, one of the links having a property that indicates a display format for the link, wherein the link relates a spot in a document page with an executable object.

EVIDENCE APPENDIX
37 C.F.R. § 41.37(c)(1)(ix)

None.

RELATED PROCEEDINGS APPENDIX
37 C.F.R. § 41.37(c)(1)(x)

None.